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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,898	11/25/2003	David H. Mead	IN-5692	1188
26922	7590	10/04/2005	EXAMINER	
BASF CORPORATION ANNE GERRY SABOURIN 26701 TELEGRAPH ROAD SOUTHFIELD, MI 48034-2442			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,898

Applicant(s)

MEAD ET AL.

Examiner

Kevin R. Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 15, 22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-14 and 16-21, drawn to a plastisol composition and an article comprising said composition, classified in class 428, subclass 411.1+.
 - II. Claim 15, drawn to a method of preparing an article of architectural siding, classified in class 264, various subclasses.
 - III. Claims 22 and 23, drawn to a method of protecting a building, classified in class 52, subclass various subclasses.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by a materially different process. For example, the product could be formed by pre-shaping the backing material.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

3. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the

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process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product could be used in a materially different process of using. For example, the product could be used as a paper weight

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, the inventions have different functions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Anne Gerry Sabourin on Monday September 26, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-14 and 16-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15, 22, and 23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-8, 10, 11, 13, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ravinovitch et al (US 4,424,292), as evidenced by US 4,728,667.

Ravinovitch teaches a vinyl polymer composition suitable for outdoor use in the sunlight. The heat buildup in articles made from the composition is lowered without changing the UV protection or the color of the articles by employing in the composition an infrared reflective pigment (abstract). The vinyl polymer is a vinyl chloride (col 2, lines 38+) comprising a plasticizer or a mixture of plasticizers (col 3, lines 54+). Suitable plasticizers include phthalates (col 3, lines 54+). The pigment is used in amounts such as to lower the heating of the article without changing the UV protection or color thereof (col 4, lines 18+). Said teaching is understood to read on the limitations of claims 6 and 8 that “a sufficient amount of the pigment is used such that there is essentially no transmittance of light of near infrared wavelength through a coating layer of a desired thickness formed from the plastisol composition. The film may be utilized alone or applied as a capstock to a substrate (col 3, lines 18+). Said structures when used as a vinyl siding are understood to be flexible (see US 4,728,667; col 1, lines 6+).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Ravinovitch et al (US 4,424,292), as applied to claims 1-4, 6-8, 10, 11, and 13 above, and further in view of Ceprini et al (US 4,316,987).

Ravinovitch is relied upon as above, but does not teach the use of the claimed plasticizer. However, Ceprini teaches 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate plasticizers may be used with vinyl halides to give excellent optical properties (col 1, lines 1+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate plasticizers in the plastisol taught in Ravinovitch. The motivation for doing so would have been said plasticizers produce PVC films with excellent optical properties.

5. Claims 9, 12, and 21 are rejected under 35 USC 103(a) as being unpatentable over Ravinovitch et al (US 4,424,292), as applied to claims 1-4, 6-8, 10, 11, and 13 above, and further in view of Wheatley et al (US 5,233,465).

Ravinovitch is relied upon as above, but does not teach the claimed thickness. However, Wheatley teaches the reflection spectra of a particular film is primarily

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dependent on the optical thickness of the individual layers (col 1, lines 26+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the thickness of the infrared reflective pigment-containing layer taught in Ravinovitch. The motivation for doing so would have been to optimize the reflection spectra of the layer.

6. Claims 14 and 18 are rejected under 35 USC 103(a) as being unpatentable over Ravinovitch et al (US 4,424,292), as applied to claims 1-4, 6-8, 10, 11, and 13 above, and further in view of Sullivan et al (US 6,416,868).

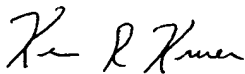
Ravinovitch is relied upon as above, but does not teach that the capstock should be applied to a metal substrate. However, Sullivan teaches an IR reflective coating that reduces IR induced heat buildup (abstract). Said coating is useful on wood, glass, ceramic, metal and plastic substrates (col 6, lines 47+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the coating taught in Ravinovitch to metal siding known in the art. The motivation for doing so would have been that Sullivan teaches IR induced heat buildup is an issue on metal substrates as well as plastic substrates.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer
Patent Examiner-Art Unit 1773